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# CHARLESTON HARBOR PROJECT MODEL MARINA SITING ORDINANCE

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Prepared for

\_\_\_\_\_, South Carolina

Prepared by



**Definitions:** Marina - a marina is any of the following: (a) a locked harbor facility; (b) any facility which provides fueling, pump-out, maintenance or repair services (regardless of length); or (c) any facility which has permanent docking space of equal to or greater than greater 200 linear feet and/or five or more boat slips<sup>1</sup>.

Dry Stack Storage for Boats - a facility for storing and keeping boats out of water. This is principally a land-based operation, where boats are dry stored or "stacked" until such time as they are transferred to the water for use. Because of the mechanics involved in this operation, dry stack marinas seldom accommodate boats in excess of 25 feet.

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## 1 MARINAS

### 1.1 Permitted uses.

1.1.1 Services. Marinas may provide the following services if specifically authorized by a conditional use permit approval:

1.1.1.1 Launching ramps and small hoists (to accommodate primarily the launching of watercraft not exceeding 4,000 pounds in residential and agricultural districts;

1.1.1.2 piers, wharves and other facilities for the berthing and securing of recreational watercraft;

1.1.1.3 dockside maintenance and repair necessary to keep watercraft in operable condition;

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<sup>1</sup> A boat slip equals 40 feet in length.

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1.1.1.4 wet storage and mooring of seaworthy pleasure craft in operable condition;

1.1.1.5 dispensing of fuel subject to Fire and Explosive Hazards standards;

1.1.1.6 shower and laundry facilities for marina clientele only; and

1.1.1.7 vending machines.

1.1.2 Additional Services. Excluding marinas in agricultural and/or residential districts, marinas providing 50 or more boat slips may provide the following additional services:

1.1.2.1 bait and tackle retail sales;

1.1.2.2 retail sales of basic marine supplies and accessories necessary for boat operation, maintenance and upkeep (not to include the sale of boats and/or motors); and

1.1.2.3 snack bars and retail groceries.

1.1.3 Other uses or services. Marinas may provide such additional activities or services as permitted

## 1.2 Performance Standards

In addition to any other applicable provisions of the Ordinance, marinas shall be subject to the following performance standards.

- 1.2.1 Lot size and location. The property shall have a minimum of one acre of high ground above the mean high water mark when public water and public sewer are not available, shall have frontage on a public owned road, and have a minimum width of 150 feet at the water front.
- 1.2.2 Services. All services provided by the marina shall be located on the same zoning lot or on the piers associated therewith.
- 1.2.3 Structures. All retail sales and services shall be enclosed. The maximum structure size or bulk shall be limited to 10 square feet of net floor area for each boat slip.
- 1.2.4 Setbacks. All structures shall be set back a minimum of 100 feet from abutting property zoned as agricultural and/or residential districts except where the property line is the street right-of-way line, in which case the front yard established for the zoning lot shall apply.
- 1.2.5 Parking. Off-street parking shall be provided in accordance with the provisions set forth elsewhere in this zoning ordinance. In addition, the following provisions will be made:
- 1.2.5.1 Any parking associated with the use of the launching ramp and other marine activities must be accommodated on-site.
- 1.2.5.2 Parking surfaces and off-street roads or driveways within the facility shall be graded and covered with a permanent dustproof surface. If the marina is located next to Office of Coastal Resource Management-designated critical areas or areas of geographic concern, parking surfaces and off-street roads or driveways shall be

graded and covered with a permeable, dustproof surface.

1.2.5.3 For each zoning lot in any district, the number of off-street parking spaces required under this Article shall be as follows:

1.2.5.3.1 Marinas: Three (3) spaces for every four slips. One space for each boat trailer parking facility. For commercial activity, see applicable land use.

1.2.5.3.2 Dry Stack Storage for boats: One for every three boat racks.

*(See Parking Standards for Marinas handout for additional parking standards)*

1.2.6 Storage. Areas for boat trailer storage and open field boat storage shall be designated and screened in accordance with screening standards found in this ordinance (refer to section number) from any adjacent agricultural or residential districts. Open field boat storage on trailers may be provided on a ratio of one 10 x 20 space for each two boat slips.

1.2.7 Screening. In addition to the applicable screening provisions set forth in the district descriptions and this ordinance (refer to section number), areas for boat trailer storage and open field boat storage shall be screened from adjacent agricultural and/or residential districts in accordance with any other screening provisions set forth in this ordinance.

1.2.8 Signs. Any sign provisions in this ordinance shall apply for all signs located within the district. Those signs which identify commercial activity shall be placed and designed so as not to attract the general public.

1.2.9 Wastewater Disposal Facilities. Wastewater disposal facilities shall meet the requirements of the regulatory agencies having jurisdiction.

1.2.10 Firefighting or Fire Prevention. Firefighting or fire prevention equipment shall be as specified by the local fire district in which located.

1.2.11 Siting Standards. The issuance of a conditional use permit for a marina shall be subject to the siting standards contained in the Marina Impact Matrix.

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## MARINA SITING STANDARDS

Marina Impact Matrix

Elements Impacted by Marina Siting	Conditions Generally Acceptable to Marina Siting	Conditions Generally Marginal to Marina Siting, Requiring Mitigation	Conditions Generally Unacceptable to Marina Siting
Water Quality (classification)	SB - <u>Marina siting is generally acceptable</u> in SC waters.	SA, B, and SFH - <u>Marina siting may be acceptable</u> in SA, B, and SFH water, provided such siting will not result in the lowering of water quality; the closing of existing shellfish areas open to harvesting; or otherwise interfere with existing uses of such waters, as determined by DHEC.	SFH, ORW, and A - <u>Marina siting is generally unacceptable</u> in ORW and A waters including waters of pristine quality, i.e. the South Edisto River Basin and the Cape Romain Estuary. A marina siting on these waters would jeopardize the upgrading and reclassification of such areas in the future.
<u>Water Depth</u>	Adequate for all recreational boats-- <u>no dredging required</u> .	Inadequate for recreational boats--no alternative to dredging; however, required dredging: (1) will have no measurable impact on existing shellfish grounds, nursery areas or submerged aquatic vegetation of value to fish, shellfish and wildlife, and (2) deposits may be disposed of in a manner acceptable to the U.S. Corps of Engineers.	Inadequate for recreational boats--required dredging: (1) will destroy existing harvestable shellfish grounds, nursery areas, submerged aquatic vegetation of value to fish, shellfish and wildlife or (2) will produce stagnant water conditions, fish entrapments or degrade water quality.

# MARINA SITING STANDARDS

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Elements Impacted by Marina Siting	Conditions Generally Acceptable to Marina Siting	Conditions Generally Marginal to Marina Siting, Requiring Mitigation	Conditions Generally Unacceptable to Marina Siting
<u>Bridges</u>	<p>Marina siting will have no direct impact on existing bascule and swing bridges.</p> <p><b>Note:</b> In making this determination: (1) a marina siting on either side of the Ben Sawyer or Wappoo Bridge shall be considered to have no direct impact, because of their relative height and urban location on the Intracoastal Waterway; and (2) a marina siting on the waterway and/or Charleston Harbor side of any other bascule or swing bridge shall be considered to have <u>no direct impact</u>, as opposed to a siting on the opposite side.</p>	<p>Marina siting will have an impact on bridge traffic, but because of conditions at the bridge, the impact may be mitigated where: (1) vehicle crossings are less than 10,000 per day, as reported by the most recent Dept. of Transportation count, and (2) vertical clearance beneath the bridge is at least 7.5 feet, but no greater than 15 feet.</p>	<p>Marina will have an unacceptable impact on bridge traffic, where (1) vehicle crossings exceed 10,000 per day as reported by the most recent Dept. of Transportation count, and (2) vertical clearance beneath the bridge is less than 15 feet.</p> <p><b>Note:</b> Dry stack marinas shall be exempt from these conditions, provided (1) no boats exceeding the clearance of any bridge between the marina and the ICWW are stored or kept at the facility, (2) no fuel pumps shall be accessible from the water, and (3) assurances to this effect shall be provided and shall constitute "conditions of approval".</p>
<u>Streets and Roads</u>	<p>Marina siting will have no significant impact on existing traffic patterns; create no hazardous intersections; cause to be installed no additional traffic controls; or utilize neighborhood or minor streets as the principal means of access, unless, of course, the proposed marina is a residential docking facility, designed to serve the neighborhood in question.</p>	<p>Marina siting will impact the transportation system, but the situation may be mitigated through street design modification, such as acceleration-deceleration ramps, street alignments, installation of traffic controls, and other design alternatives which would minimize the impact.</p>	<p>Marina siting will have a substantial negative impact, where, (1) neighborhood streets would provide the primary access to a commercial or boatyard marina, or (2) a potentially hazardous intersection would be created.</p>



# MARINA SITING STANDARDS

## Marina Impact Matrix

Elements Impacted by Marina Siting	Conditions Generally Acceptable to Marina Siting	Conditions Generally Marginal to Marina Siting, Requiring Mitigation	Conditions Generally Unacceptable to Marina Siting
Marsh Areas, Wetlands, Areas of <u>Particular Concern</u>	Marina siting will have <u>no</u> significant affect on marshes, wetlands, mudflats, and similar areas contiguous or adjacent to coastal waters.	Marina siting would impact marshes, wetlands or mudflats, but through proper site planning and design consideration of the following elements, the impact could be eliminated or reduced to an acceptable level by; (1) providing open dockage to deep water, as opposed to excavation and filling; (2) limiting impervious surface areas to not more than 25 percent of the "high ground"; (3) utilizing best management practices (BMP's) as recommended by the S.C. Coastal Council, in the design of a stormwater runoff system (see SCCC Stormwater Management Guidelines); (4) minimizing any disturbance of such areas by retaining them, as nearly as possible, in an unaltered state.	Marina siting would substantially impact marsh and wetlands, disturbing and disrupting the use of such areas as wildlife habitats, and marine life resources. Also, where marina siting would affect an irreplaceable historic and archaeological site.
<u>Shellfish Areas</u>	Marina siting is generally acceptable in any polluted areas or areas closed to shellfish harvesting. This includes principally SA and SC classified waters.	Marina siting is generally unacceptable in any SFH classified waters, but may be located in such areas where: (1) they have been closed to shellfish harvesting by DHEC; (2) they are void of shellfish beds; or (3) they would cause <u>no</u> closing or destruction of any known shellfish areas of value from human consumption or marketing purposes.	Marina siting is generally unacceptable: (1) in any SFH classified waters where there is an <u>existing use of</u> <u>shellfish</u> which would be closed or destroyed by such a siting; or (2) in any ORW, pristine classified waters, or waters capable of meeting ORW standards.

# MARINA SITING STANDARDS

## Marina Impact Matrix

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<u>Existing Land Use</u>	Marina siting is generally acceptable (1) where recommended by applicable land use plans, (2) where permitted by applicable zoning regulations as a <u>use by right</u> , or (3) where such siting is sufficiently removed from existing residential development so as to have no impact on such use.	Where marinas are permitted by zoning as <u>conditional uses</u> , the implication is that such a siting could have a negative impact on existing land use. To reduce if not eliminate such a possibility, the following safeguards are recommended: (1) require installation of bufferyards, appropriately dimensioned to assure adequate buffering of adjacent land uses from noise, light, access or visual nuisance; (2) limit the size and scale of the marina <u>if</u> the area to be impacted is predominantly residential and the waters are used for primary contact recreational activities; (3) require landscaping and structural design modification as appropriate for the area in which the marina is to be located; and (4) impose other requirements as necessary to make the marina compatible with exiting land uses.	Marina siting is prohibited from certain areas by some local zoning ordinances, and is not recommended for others by some local land use plans. But ordinances and plans are subject to change. As a result, a more definitive <u>criteria prohibiting such development is recommended</u> where such a change: (1) would create a "spot zone" or isolated district unrelated to adjacent properties; (2) would be incompatible and at variance with existing land uses; (3) would be a detriment to improvement or development of adjacent property; (4) would adversely affect property values in adjacent areas; (5) would allow a land use out of scale with the needs of a given neighborhood or community; or (6) create a safety hazard in water areas used extensively for primary contact recreational activities.

# MARINA SITING STANDARDS

## Marina Impact Matrix

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<u>Public Services and Utilities</u>	Marina siting can be accommodated with "in-place" water lines, sewerage facilities, fire and police protection, etc., creating no additional need for such facilities or demands on such services.	Marina siting will create additional demands for public services and utilities, but all such essential support elements can and will be made available to the site without creating an excessive demand on local government.	Marina siting: (1) cannot be adequately facilitated without creating an excessive demand on local government for drainage system improvements, additional fire and police protection, and/or water and sewer facilities, including any additions necessary to handle "pump-out" facilities; or (2) <u>all</u> essential public services and facilities are not available to the site.

# PARKING STANDARDS FOR MARINAS

## Prepared for the Charleston Harbor Project Draft Marina Siting Ordinance

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### Charleston County, SC - Marinas:

Three (3) spaces for every four slips. One space for each boat trailer parking facility. For commercial activity, see applicable land use.

*Source: Charleston County Zoning Regulation Sec. 30.65.40, page.*

### Charleston County, SC - Dry Stack Storage:

One for every three boat racks.

*Source: Charleston County Zoning Regulation Sec. 30.65.40, page.*

### Charlotte County, FL - Commercial Marina:

One (1) parking space for every ten (10) docking slips and required parking for accessory uses.

*Source: Charlotte County Zoning Regulation 3-9-90, page 172.*

### Institute of Transportation Engineers (ITE):

- a. Average Weekdays - .26 (approximately one (1) parking space for every four (4) boat slips).
- b. Average Saturdays - .49 (approximately one (1) parking space for every two (2) boat slips).
- c. Average Sundays - .49 (approximately one (1) parking space for every two (2) boat slips).

*Source: Study of a public marina in the Seattle, Washington Central Business District (CBD) published in the ITE Parking Generation Report (1987); 2nd edition).*

## Urban Land Institute (ULI):

Marina Design	Number of Slips <sup>2</sup>	Parking Spaces	
		Rental Spaces	Condominium Projects <sup>3</sup>
Shoreline	6 per 100'	9.0-12.0 per 100'	12.0-13.2 per 100'
Internal Basin	12 per acre	13.5-24.0 per acre	24.0-26.4 per acre
Pier/Peninsula Pier	22 per acre	33.0-44.0 per acre	44.0-48.4 per acre
Peninsula	18 per acre	27.0-36.0 per acre	36.0-39.6 per acre

Source: Urban Land (September 1989)

## American Planning Association/Planning Advisory Services (APA/PAS) - Standards of Various Local Governments

- a. One (1) parking space per two boat slips (Lexington County, SC).
- b. One (1) parking space per 200 sq. ft. of enclosed floor space not used for storage facilities, plus one (1) parking space for every three (3) wet slips and one (1) parking space for every five (5) of dry storage (Hilton Head Island, SC).
- c. One (1) parking space per boat slip. At least twenty (20%) percent of the spaces shall be at least nine and one-half (9-1/2) by thirty-five (35) feet to accommodate cars with trailers (Lake County, IL).
- d. One parking space per boat slip (Hillsborough County, FL).

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<sup>2</sup> For 40-foot long slips.

<sup>3</sup> Based on 1.5 to 2.0 spaces per slip in rental projects and 2.0 to 2.2 spaces per slip in condominium projects.

- e. One and one-half (1-1/2) parking space for each one (1) boat slip (Bay City, MI).
- f. 0.7 parking space for every one (1) boat slip; town (2) parking spaces for every three (3) employees on the maximum shift. Also, one (1) parking space for every vehicle customarily used in operation of the use or stored on the premises (St. Louis County, MO).

**International Marine Institute (IMI):**

0.5 car per boat slip. One (1) parking space for every two (2) boat slips.

*Source: Auto Parking in Marinas. Author: Neil M. Ross, IMI President.*

**National Marine Manufactures Association (NMMA):**

- a. 0.6-0.8 parking spaces/boat slips. One (1) parking space for every six to eight (6-8 boat slips). *Source: Bruce Tobiasson, Principle, Waterfront Design Associates, Medfield, MA.*
- b. One hundred (100) cars per one (1) acre of land (including parking, isles, and minimum landscaping). *Source: Winthrop Harbor, Illinois study - conducted Johnson, Johnson, and Roy, Ann Arbor, Michigan for the Illinois Conservation Department*